SURVEY ON NEUROBIOLOGY

Bibliography of Genetic Neurology

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SURVEY ON NEUROBIOLOGY

Bibliography of Genetic Neurology

Compiled and annotated by
AGNES S. BURT, M.D., Ph.D.

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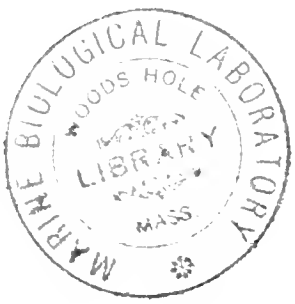

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PART I.

DEVELOPMENT, GROWTH AND REGENERATION OF THE NERVOUS SYSTEM

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------ 1937. Experimentelle Untersuchungen über die transneuronale Degeneration. Verhand. d. Anat. Gesell. Ergäzungs. z. 83 d. Anat. Anz. 148-152. (Cat; one-sided section of preganglionic cervical fibers; bilateral section internal carotid nerves; failure of myelinization on side with preganglionic section. Interpreted as effect of nerve stimulus on myelinization.)

------- 1937. Die Nervenversorgung des Myokards. Zeitschr. Zellforsch. u. Mikrosk.-Anat. 27: 246-266. (Embryos; man and cat; adult cats, extirpation of stellate ganglia, section of vagi and nn. vertebrali, spinal ganglia; migration and histogenesis of sympathetic and Schwann cells, study of nerve endings of heart, nerves of supply of different regions.)

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------, R. S. BEAR and G. L. CLARK. 1935. The role of lipoids in the X-ray diffraction patterns of nerve. Science 82: 44-45. (Demonstration of polarized arrangement of fluid crystals of myelin sheath.)

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SCHNEIDER, G. 1940. Der Einfluss des Nervensystems auf die Regeneration der Extremitäten der Axolotl. Zool. Jahrb. Abt. Allg. Zool. u. Physiol. Tiere. 60: 73-102. (Siredon pisciforme; amputation hind limb, section spinal nerves 15-17; trophic effect of nerves on regeneration, effects of starvation, deviation on course of nerve.)

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SCHOTTÉ, O. 1922. Influence des nerfs sur la régénération des pattes antérieures de Tritons anourés. C. R. Séances Soc. phys. et hist. nat. de Genéve 39: 67-70, and 85-89. (Retardation of regeneration rate of anterior limbs following section of corresponding nerves in Triton.)

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SCHOTTÉ, O. 1923. Régénération et système nerveux chez les larves de Batraciens urodèles. C. R. Soc. Phys. et Hist. natur. Genève, 40: 100. (Salamander and Triton larvae; section of limb nerves at various times preceding limb amputation. Dependence of regeneration on (probably sympathetic) components of nerve.)

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------ 1924. Le grand sympathique est le seul facteur nerveux de la régénération des membres de Tritons. C. R. Soc. Phys. et Hist. natur. Genève 41: 45. (Extirpation of crural spinal ganglia leaving rami communicantes intact; regeneration of amputated limb in complete absence of sensory and motor innervation, presence of sympathetic supply.)

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------ 1937. Trophic control of non-nervous tissues by the nervous system: a study of muscle and bone innervated from an isolated and quiescent region of spinal cord. Jour. Comp. Neur. 67: 241-261. (Puppies; section posterior roots and double transection lumbo-sacral cord; atrophy and contracture of corresponding mm., effects on interstitial fibrous tissue, growth in thickness of bones, muscle attachments.)

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UMANSKI, E. 1935. Über die Wirkung des Organisators in destruierten Geweben. Zool. Anz. 112: 205-206. (Rearrangement of completely macerated medullary plate tissue under the influence of an "organizer" into typical cell pattern of neural tube.)

------- 1935. Über die gegenseitige Vertretbarkeit präsumptiver Anlagen der Rückenmark- und Gehirnteile bei den Amphibien. Zool. Anz. 110: 25-30. (Triton taeniatus; grafts to and from medullary plate; dependence of neural development on properties of host chordamesoderm rather than on characteristics of donor.)

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VAN CAMPENHOUT, E. 1929. (Contribution to the problem of the origin and development of the sympathetic nervous system. Proc. Soc. Exp. Biol. Med. 26: 824-825. (Preliminary paper.)

------ 1930. Contribution to the problem of the development of the sympathetic nervous system. Jour. Exp. Zool. 56: 295-320. (Rana pipiens; extirpation neural crest; complete absence spinal and sympathetic ganglia; abnormalities in motor cells, absence Rohon-Beard cells; absence chromaffin portion of adrenals, enteric plexi. Extirpation hindbrain, independent differentiation of vagal ganglion, with absence of visceral branch.)

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------ 1932. Further experiments on the origin of the enteric nervous system in the chick. Physiol. Zool. 5: 333-353. (Chorio-allantoic grafting of transverse trunk slices chick embryo; autonomous differentiation of enteric NS free from vagus; origin of cells from sympathoblasts.)

------ 1933. Contribution a l'étude de la formation des nerfs olfactifs. Trans. Roy. Soc. Canada, Sec. 5 27: 101-102. (Pig embryos; origin of olfactory Schwann cells from olfactory placode, histological observations.)

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------ 1935. Intraocular optic nerves in embryos of Rana pipiens. Anat. Rec. 61: 351-358. (Enucleation and regrafting of eye in orbit; growth of optic nerve within eye between various coats rather than out to diencephalon; presence of normal glial elements in both central and peripheral stumps.)

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PART II.

DEVELOPMENT OF BEHAVIOR

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------ 1939. Studies in the physiology of the embryonic nervous system. II. Experimental evidence on the controversy over the reflex theory in development. Jour. Comp. Neur. 70: 437-459. (Chick and frog embryos; relation of physiological conditions, environment, curarization, and type of stimulus to genesis of local reflex response.)

------ 1939. Studies in the physiology of the embryonic nervous system. IV. Development of acetylcholine in the chick embryo. Jour. Neurophysiol. 2: 488-493. (No positive correlation between development of ACh and development of reflex behavior.)

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------ 1925. The development of progression and posture in young opossums. Amer. Jour. Physiol. 74: 1-13. (Pouch young; section of brain at trigeminal level, decerebration; production of increased motility in very young animals, decerebrate rigidity in older ones.)

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------ 1929. A correlated study of the development of reflex activity in fetal and young kittens and the myelinization of tracts in the nervous system. Carnegie Inst. Washington Publ. 394. Contrib. to Embryol. 20: 127-171. (Sequence of myelinization, correlation with behavior and relation to phylogenetic development of fiber tracts.)

------ 1930. Medullated tracts in the brain stem of a seventh-month human fetus. Carnegie Inst. Washington Publ. 407. Contrib. to Embryol. 21: 37-52. (Myelinization of cranial nerves, brain and spinal cord fiber tracts. Correlation with function.)

------ 1932. Development of behavior patterns and myelinization of tracts in nervous system. Arch. Neur. Psychiat. 28: 1365-1382. (Man, cat, opossum; relation of myelinization to phylogenetic development of fiber tracts, function.)

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------ 1933. Development of behavior patterns and myelinization of the nervous system in the human fetus and infant. Carnegie Inst. Washington Publ. 443. Contrib. to Embryol. 24: 3-57. (Opossum, cat, man; development of reflex behavior correlated with myelinization of the nervous system; adequate stimuli for first fetal movements.)

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LENGERKEN, H. von. 1924. Kopftransplantation an Coleopteren. I. Zool. Anz. 59: 166-170. (Hydrophilus piceus, Dytiscus marginalis, Cybister laterimarginalis; head grafts; persistence of movements in extremities and gut for many days without reference to presence of head. Effects of xenoplastic grafts on pigmentation; lack of effects of heterosexual grafts on sex instincts. Severe criticism of work of Finkler on head transplantation in insects.)

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MATTHEWS, S. A. and S. R. DETWILER. 1926. The reactions of Amblystoma embryos following prolonged treatment with chloretone. Jour. Exp. Zool. 45: 279-292. (Time of appearance of normal and abnormal reflex responses after prolonged chloretone anesthesia during embryonic development.)

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MATTHEY, R. 1925. Recupération de la vue après resection des nerís optiques chez le Triton. C. R. Soc. Biol. 93: 904. (Molge cristatus adults; section of optic nerves; functional and anatomical proof of return of vision.)

------ 1926. Recupération de la vue après greffe de l'oeil chez le Triton adulte. C. R. Soc. Biol. 94: 4. (Return of vision after eye transplantation in adult Triton; completely normal histology of retina and optic nerve. See Koppanyi.)

------ 1927. La greffe de l'oeil. Étude experimentale de la greffe de l'oeil chez le Triton (Triton cristatus.) (Eye transplantation in the newt.) Roux' Entw.-Mech. d. Organ. 109: 326-341. (Transplantation of eyes in larvae; complete anatomical regeneration, formation of normal brain connections; transection of optic nerves in adults followed by return of vision as shown by various functional tests.)

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MIGLIAVACCA, A. 1930. Ricerche sperimentali sulla rigenerazione del midollo spinale nei feti e nei neonati. (Experimental studies on the regeneration of the spinal medulla in fetuses and newborn mammals.) Arch. Ist. Biochim. Ital. 2: 201-236. (Animals??; report of rare cases of successful anatomical and physiological regeneration of spinal medulla in newborn animals.)

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------ 1930. La régénération du système nerveux central avant et après la naissance. Arch. Ital. Biol. 83: 109-123. (Critique of work of Hooker and Nicholas who did not control their observations with specific histological nerve stains.)

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MOOKERJI, H. K., D. N. GANGULI and M. ISLAM. 1945. Variation in the embryonic movements during the process of hatching in Labeo rohita and Cirrhina mrigala. Sci. and Culture 11: 268-269. (Carp embryos; descriptive; genesis of movement; no correlation with nerve development is described.)

MOORE, A. R. and J. C. WELCH. 1939. Associative hysteresis in larval Amblystoma. Proc. Soc. Exp. Biol. Med. 42: 425-426. (Learning in larval Amblystoma.)

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MOYER, E. K. 1943. The innervation of supernumerary limbs by heterotopically grafted brachial cords inAmblystoma punctatum. Jour. Exp. Zool. 94: 97-114. (Heterotopic transplantation; production of uncoordinated reflex movement in supernumerary limbs.)

MUNN, N. L. 1940. Learning experiments with larval frogs. A preliminary report. Jour. Comp. Psychol. 29: 97-108. (Hyla, bullfrog; learning behavior in Y and T mazes.)

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NEWBERRY, H. 1941. The measurement of three types of fetal activity. Jour. Comp. Psychol. 32: 521-530. (Human; tambour recordings during normal pregnancies, incidence of hiccuping, kicking, and squirming movements during last 5 lunar months.)

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------ 1942. Reestablishment of visuomotor coordinations by optic nerve regeneration. Anat. Rec. 84: 470. (An abstract.)

------ 1943. Effect of 180 degree rotation of the retinal field on visuomotor coordination. Jour. Exp. Zool. 92: 263-279. (Triturus viridescens; excision and reimplantation of eye; functional maladaptation produced by retinal reorientation; regeneration.)

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------ 1944. Optic nerve regeneration with return of vision in anurans. Jour. Neuro-physiol. 7: 57-69. (6 specimens larval and adult anurans; regeneration independent of orientation of eye; relation of subsequent function to retinal orientation.)

------ 1945. Restoration of vision after crossing of optic nerves and after contralateral transplantation of eye. Jour. Neurophysiol. 8: 15-28. (Anurans, urodeles; regeneration of fibers and peripheral regulation of central synaptic associations; no modification by learning.)

------ 1945. Centripetal regeneration of the 8th cranial nerve root with systematic restoration of vestibular reflexes. Amer. Jour. Physiol. 144: 735-741. (Anuran larvae; intracranial transection; restoration of central reflexes.)

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------ 1944. Transplanted eyes. Yale Sci. Mag. 18: 8-9, 32. (Summary article.)

------ 1944. Functional polarization in retinal development and its reestablishment in regenerating retinae of rotated grafted eyes. Proc. Soc. Exp. Biol. Med. 57: 13-14. (Triturus viridescens; excision and reimplantation; lability of polarization.)

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------- 1937. Further experimental investigations on the phenomenon of homologous response in transplanted amphibian limbs. III. Homologous response in the absence of sensory innervation. Jour. Comp. Neur. 66: 537-548, (Axolotls; excision of dorsal roots and ganglia from forelimb region; transplantation of supernumerary limbs; production of homologous response.)

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------- 1929. The relation of the level of transection of the brain stem to the occurrence of decerebrate rigidity in young animals. Jour. Comp. Neur. 48: 227-245.

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------- 1931. The neurofibrillar structure of the spinal cord of cat embryos correlated with the appearance of early somatic movements. Jour. Comp. Neur. 53: 71-114. (Pyridine silver, Bielchowsky preparations; histological study of reflex arcs in embryos previously studied physiologically; cephalo-caudal gradient of differentiation.)

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------- 1934. Correlation between the development of local reflexes and reflex arcs in the spinal cord of cat embryos. Jour. Comp. Neur. 59: 487-505.

------- 1936. Genesis of somatic behavior in mammals. Jour. Physiol. 87: 31-39.

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------- 1920. La conduction aneurale de l'ectoderme chez les embryons d'Amphibiens. C.R. Acad. Sci. 171: 680. (Axolotl, frog; transection spinal cord; demonstration of cutaneous transmission of excitation.)

------- 1920. Les fonctions embryonnaires des appareils de relation chez les Vertébrés anammiotes. C.R. Acad. Sci. 171: 827. (Amphibia, Selachians; functional significance of early embryonic movements; description of their nature.)

------- 1920. La propagation du mouvement ondulant des muscles du squelette chez les embryons avancés de Sélaciens (Scylliorhinus canicula L. Gill) après section ou resection partielle de la moelle. C.R. Acad. Sci. 170: 958. (Transmission of undulatory movements over peripheral nerves for 6 segments beyond transected spinal cord.)

------- 1920. La valeur comparée et le déterminisme des signes principaux de la contraction myotomique aneurale observée chez les embryons de Sélaciens (Scylliorhinus canicula L. Gill). C.R. Acad. Sci. 171: 1086. (Description of nature of aneural myogenic contractions; site of origin; effects of oxygen, temperature, and maturation on this phenomenon.)

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------- 1920. L'influence de la témperature sur le fonctionnement des chaines myotoniques aneurales des Sélaciens (Scylliorhinus canicula, L. Gill). C.R. Soc. Biol. 83: 1467. (Relation of temperature to extent and speed of movement. Lack of conformity to Van't Hoff's law. Embryos.)

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------- 1940. A primary and a secondary somatic motor innervation in Amblystoma. Jour. Comp. Neur. 73: 139-151. (Histological demonstration; correlation with function.)

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